

Antibody Expressing Positive Control Vector

Cat. no. A14662	Amount 150 µg (at 1 mg/mL)	Storage -20°C
Pub. Part no. 100014710	Pub. no. MAN0006286	Rev. A.0

Description

Antibody Expressing Positive Control Vector is provided as a positive control for transfection and expression in Expi293F™ and ExpiCHO-S™ cells. The control contains pcDNA3.4 plasmid clones expressing the heavy and light chains of a rabbit IgG. The control is provided as a ready-to-use transfection-grade plasmid at a concentration of 1 mg/mL with a 2:1 light chain:heavy chain ratio and is sufficient to transfect up to 150 mL of Expi293F™ or ExpiCHO-S™ cells.

Optimized transfection conditions for Expi293F™ cells

Culture volume to transfect: 25.5 mL

Number of cells to transfect: 7.5×10^7 cells (final cell density of 2.5×10^6 cells/mL) with >95% viability

Amount of control plasmid DNA: 30 µL (1 µg of plasmid DNA per mL of Expi293F™ culture to be transfected)

Amount of ExpiFectamine™ 293 Reagent: 80 µL

For detailed instructions to transfect suspension Expi293F™ cells, see the Expi293™ Expression System user guide (Pub. no. MAN0006696), available for download at www.thermofisher.com/exp293.

Expression in Expi293F™ cells

The rabbit IgG expressed by the control will be secreted into the Expi293™ Expression Medium. Expression can be detected by day 3 post-transfection; however maximum yield is obtained 6–7 days post-transfection. The expected yield of the control IgG is approximately 200–300 mg IgG per liter of culture on day 7.

Optimized transfection conditions for ExpiCHO-S™ cells

Culture volume to transfect: 25 mL

Number of cells to transfect: 1.5×10^8 cells (final cell density of 6×10^6 viable cells/mL)

Amount of control plasmid DNA: 20–25 μ L (0.8–1 μ g of plasmid DNA per mL of ExpiCHO-S™ culture to be transfected)

Amount of ExpiFectamine™ CHO Reagent: 80 μ L

Note: For detailed instructions to transfect suspension ExpiCHO-S™ cells, see the ExpiCHO™ Expression System user guide (Pub. no. MAN0014337), available for download from www.thermofisher.com/expicho.

Expression in ExpiCHO-S™ cells

The rabbit IgG that is produced in ExpiCHO-S™ cells after transfection with the control vector is secreted into the ExpiCHO™ Expression Medium, with optimal yields obtained between 8–10 days for the Standard protocol (200–300 mg/L), 10–12 days for the High Titer protocol (300–500 mg/L), and 12–14 days for the Max Titer protocol (>500 mg/L).

Note: The titer values referenced above were determined in crude cell culture supernatants using a Pall Life Sciences FortéBio™ Octet™ instrument equipped with a protein A biosensor.

Related Products

Product	Cat. no.
Expi293F™ Cells (1×10^7 cells)	A14527
ExpiCHO-S™ Cells (1×10^7 cells)	A29127
Expi293™ Expression Medium	A14351
ExpiCHO™ Expression Medium	A29100
ExpiFectamine™ 293 Transfection Kit for 1L of culture	A14524
ExpiFectamine™ CHO Transfection Kit for 1L of culture	A29129
Opti-MEM™ I Reduced Serum Medium	31985
OptiPro™ SFM	12309
Protein A	101006
F(ab') ₂ fragment of goat anti rabbit (H+L), horseradish peroxidase conjugate	A10547
Purified Rabbit IgG	02-6102
SimplyBlue™ Safestain	LC6060

Limited product warranty

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